#### CCV STEM Studies A.S. to UVM Biomedical and Clinical Sciences B.S. Pathway **College of Nursing and Health Sciences (CNHS)** Catalogue Year: 2025-2026 **CCV DEGREE PROGRAM: STEM Studies UVM DEGREE PROGRAM: Biomedical and Clinical Sciences** Gen Ed: First Semester Seminar INT 1050 - Dimensions of Self & Society HUMN 1XXX - D1 Gen Ed: Introductory Written Expression ENG 1061 - English Composition ENGL 1001 - Written Expression, WIL1 Gen Ed: Digital and Computer Literacy Select from approved list of CCV Course Offerings Elective (please refer to the UVM Transfer Guide) Gen Ed: Mathematics Choose: MAT 2021 - Statistics I STAT 1110 - Elements of Statistics, QD Gen Ed: Natural Science Choose: BIO 2011 - Human Anatomy & Physiology I ANPS 1190 - Ugr Hum Anatomy & Physiology 1 Gen Ed: Social Science Choose: ANT 1010 - Cultural Anthropology ANTH 1100 - Cultural Anthropology, D2, S1, SU Gen Ed: Arts and Aesthetics *Choose from one of the following:* ARH 1040, ARH 1050, ARH 2011, ARH 2012, ARH 2050, ART 1011, All options can be applied towards the (AH) Arts & Humanities CCC ART 1020, ART 1060, ART 1070, ART 1160, ART 1170, ENG 2120, requirement. (please refer to the UVM Transfer Guide) ENG 2150, FLM 1050, FLM 2060, HUM 2200 Gen Ed: Humanistic Perspectives Choose: HUM 2020 - Bioethics PHIL 2XXX - AH3, GC2 (exception for NH 2200) Gen Ed: Communication Choose: COM 1020 - Interpersonal & Small Group Communication SPCH 1XXX - OC Gen Ed: Research & Writing Intensive Choose: ENG 2135 - Technical Writing & Research ENGL 1XXX, WIL1 (exception for BHSC 1980) Gen Ed: HUM 2010 - Seminar in Educational Inquiry HUMN 1XXX - AH3, WIL1 **Program Requirements:** INT 1017 - Creative and Critical Thinking IDSS 1XXX - Elective INT 2860 - Professional Field Experience **EDEC XXXX - Elective** STEM Electives – minimum 22 college-level credits Choose all: (courses listed below total 23 credits) AHS 2015 - Principles of Public Health HLTH 1XXX - S1 (exception to apply as HSCI 1100) BIO 1212 - Intro Bio: Cells & Genetic Basis BIOL 1400 - Principles of Biology I, N2, Applies as BHSC 1340 BIO 2012 - Human Anatomy and Physiology II ANPS 1200 - Ugr Hum Anatomy & Physiology 2 CHE 1031 - General Chemistry I CHEM 1400 - General Chemistry 1, N2, QD CHE 1032 - General Chemistry II CHEM 1450 - General Chemistry 2, N2, QD CHE 2041 - Organic Chemistry I CHEM 2580 - Organic Chemistry 1 (exception for CHEM 1580) **Total Credits at CCV: 61-62**

## **Applied Biomedical Science Concentration**

Credits remaining at UVM: 57 Required + Electives

Distribution/CCC: Need 40 unique CCC credits.

MATH 1212 - Fundamentals of Calculus, MA

BHSC 1340 - Human Cell Biology, N2

MLS 2010 - Medical Diagnostic Techniques

MMG 2010 - Microbiol & Infectious Disease

BIOC 3001 - Fundamentals of Biochemistry

PATH 2010 - Intro to Human Disease

MLS 3100 - Clinical Chemistry I

Lab Course - 1 credit

MMG 3220 - Adv. Medical Microbiology w/lab

BHSC 3420 or MMG 3230 - Immunology

BHSC 3440 - Immunology Lab

MLS 3110 - Clinical Chemistry II

BHSC 3810 - Applied Molecular Biology

BHSC 3820 - Applied Molecular Biology Lab

MLS 3200 - Hematology

MLS 3300 - Clinical Microbiology

Lab Course - 1 credit

HSCI 3400 - Writing for Health Profess.

MLS 3XXX or MLS 395 Undergraduate Research, 6 credits

MLS 3910 - Fndtn of Interprofessionalism (1-cr., on-line, completed during UVM's winter session)

# **Medical Laboratory Science Concentration:**

Credits remaining at UVM: 65

<u>Distribution/CCC:</u> Need 40 unique CCC credits.

MATH 1212 - Fundamentals of Calculus, MA

BHSC 1340 - Human Cell Biology, N2

MMG 2010 - Microbiol & Infectious Disease

BHSC 2970 - Leadership and Management in Health Care

BIOC 3001 - Fundamentals of Biochemistry

PATH 2010 - Intro to Human Disease

MLS 3100 - Clinical Chemistry I

MMG 3220 - Adv. Medical Microbiology w/lab

BHSC 3420 or MMG 3230 - Immunology

BHSC 3440 - Immunology Lab

MLS 3110 - Clinical Chemistry II

BHSC 3810 - Applied Molecular Biology

BHSC 3820 - Applied Molecular Biology Lab

MLS 3200 - Hematology

MLS 3220 - Hematology Lab

MLS 3300 - Clinical Microbiology II

MLS 3400 - Immunohematology

MLS 3900 - Topics in Med. Lab. Science

MLS 3910 - Fndtn of Interprofessionalism (1-cr., on-line, completed

during UVM's winter session)

MLS 3192 - Clinical Practicum: Chemistry

MLS 3292 - Clinical Practicum: Hematology

MLS 3392 - Clinical Practicum: Microbiology

MLS 3492 - Clinical Practicum: Immunohematology

#### Notes:

Students completing Calculus and/or specific foreign languages at UVM will be required to complete placement tests prior to registering into these courses at UVM.

Students with applied transfer credit to their CCV degree and other transfer credits must send an official transcript from <u>each</u> transcribing institution to UVM. How transfer credits are accepted by CCV may differ from UVM's policies. Please note that this includes evaluation of AP, IB, and CLEP scores.

Contact Undergraduate Admissions, <u>transfer.apply@uvm.edu</u> with questions about minimum admissions requirements and about transfer credits from other institutions.

NH 1500 – App to HIth: From Pers to Syst. is waived for transfer students.

Students can utilize summer session at UVM to provide more balance to their schedules.

Students can also divide their junior year curriculum into two years, which would then require a total of three years to complete UVM requirements. Pathway scholarships still require full-time enrollment (minimum of 12 credits). Final year at UVM cannot be lightened due to clinical rotations.

Students in programs offered by the Department of Biomedical and Health Sciences (BHSC) must maintain and graduate with a cumulative grade point average of 2.30 or higher.

Students select one concentration at the end of their second year.

Students in <u>Applied Biomedical Science</u> plan to pursue careers in research, industry, or as a healthcare professional. This concentration provides students with a foundation of knowledge and skills which are appealing to numerous areas of study including biotechnology, pharmacology, veterinary science, agricultural science, and even forensics and public health. Applied biomedical science students will complete an internship or research at an approved industry partner.

<u>Medical laboratory science</u> students complete course work which prepares them for practica in medical laboratories where they will apply their biomedical knowledge and technical skills and further learn about the health and disease status of patients.

<u>Public health laboratory</u> scientists work in public health laboratories at the state, federal, and international levels. The curriculum focuses on the use of microbiology and molecular biology in the field of public health, in support of epidemiology, and to monitor health status and disease prevention strategies.

# **Public Health Laboratory Science Concentration:**

#### Credits remaining at UVM: 66-67

<u>Distribution/CCC</u>: Need 40 unique CCC credits.

MATH 1212 - Fundamentals of Calculus, MA

BHSC 1340 - Human Cell Biology, N2

MMG 2010 - Microbiol & Infectious Disease

BHSC 2970 - Leadership and Management in Health Care

BIOC 3001 - Fundamentals of Biochemistry

PATH 2010 - Intro to Human Disease

STAT 3000 or STAT 1410 - Med Biostat & Epidemiology/Basic

Statistical Methods I

MMG 3220 - Adv. Medical Microbiology w/lab

BHSC 3420 or MMG 3230 - Immunology

BHSC 3440 - Immunology Lab

BCOR 2300 - Genetics

HSCI 2400 or HSCI 3100 - Public Health

BHSC 3810 - Applied Molecular Biology

BHSC 3820 - Applied Molecular Biology Lab

NFS 3203 - Food Microbiology

NFS 3204 - Food Microbiology Lab

MLS 3300 - Clinical Microbiology II

MLS 3892 - Public Health Practicum, 12 credits

MLS 3392 - Clinical Practicum: Microbiology (or Approved Elective)

6-credits of department-approved elective credit

Total credits to earn Bachelor's degree is minimum 121. Minimum GPA of 2.30 is required for graduation.

In the fourth year, the final semester consists of a full time medical or public health laboratory practicum, or an applied biomedical research or internship at an off-campus affiliate site, which may require additional room, meal, and/or transportation expenses. Site selection for the final semester is determined by a lottery system.

Students must complete 30 of their last 45 credits at UVM to earn a UVM degree.

Information related to Academic Honors can be found in the UVM <u>undergraduate catalogue</u>. Please note: to graduate with Latin Honors, a student must have taken at least sixty credits at UVM in which a letter grade of A, B, C, D, or F has been awarded.

### CATAMOUNT CORE: UVM'S GENERAL EDUCATION CURRICULUM

